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Central Rupture of the Perineum

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ON CENTRAL RUPTURE OF THE PERINEUM.

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CENTRAL rupture of the perineum is an important accident which is generally misunderstood or imperfectly understood. This arises from two misleading circumstances; first, that it is considered only as an injury which produces a fistula-like passage, from the vagina, opening externally between the anus and fourchette, all the tissues from the skin to the mucous membrane inclusive being perforated; second, that it is considered only as an injury which is separate and distinct from ordinary laceration of the perineum, an isthmus of skin and other tissues remaining entire between it and the vulvar opening of the vagina whether entire or torn.

Now a central rupture of the perineum may take place without all the tissues being torn, or without a new artificial passage into the vagina being made. The central perineal rupture may affect only the skin, and that only partially — that is, as a split or crack. It may affect the skin only, the subjacent cellular tissue being exposed. It may affect the vagina only. Lastly, it may affect skin and mucous membrane and the tissues immediately adjacent, while there remains entire some tissue intervening between the skin and the vagina. These various forms of central rupture of the perineum are much more common than the rare, complete, perforating, central rupture which alone is generally regarded when this accident is described.

In the following case is presented an example of central rupture of the perineum consisting only of split or cracked skin.

CASE I. M. K., ætat. 25, primipara, delivered in the Royal Maternity Hospital on August 8, 1876, and examined the following day. The posterior part of the vaginal orifice was lacerated in the usual way. Continuous with this was a laceration of the fourchette and perineum to the extent of a quarter of an inch. Behind this laceration, and continuously with it, was a line of split skin which extended to the verge of the anus. The epithelium over the split was entire, but its translucency showed a line of ecchymosis beneath. On the following day the epithelium was partially removed (not artificially), and on the next day it was absent along the whole line of the split, there being now a linear and just visible raw surface. That this split was a central rupture, or one quite independent of the perineal laceration anterior to it, was evident from its length. Had it been only about a line in length, instead of fully an inch, it might have been regarded as a just more than threatened continuation of the ordinary perineal laceration that existed. Its length made this explanation of it quite untenable, and compelled us to regard it as an independent or central rupture.

The following case is an example of central rupture of the perineum where this rupture affected the whole thickness of the skin, the subjacent cellular tissue being laid bare.

CASE II. M. S., ætat. 28, primipara, delivered in the Royal Maternity Hospital, on September 5, 1876, and examined by me on the 6th. There were extensive vulvar lacerations which do not here demand description. The posterior margin of the vaginal orifice was lacerated in the usual way. Continuous with this injury was a laceration of the fourchette of slight extent. Then there was an isthmus or narrow bridge of sound skin. Behind this bridge or isthmus the perineal skin was completely lacerated for nearly an inch, and to within half an inch of the anal opening.

In this instance the skin alone was torn through centrally. The existence of the entire bridge of skin in front of the central perineal laceration, and between it and the injury of the fourchette, demonstrates its character as a central rupture, independent of the slight anterior laceration, of

which it might otherwise have been regarded as a continuation.

When the vagina alone is torn in a part corresponding to the perineum, the injury may be described and regarded as a mere vaginal split or laceration quite independent of the perineum; but laceration of the vagina is, on the other hand, quite as much a part of complete central rupture as is laceration of the skin; and it cannot but be desirable to consider its production as a partial or incomplete central rupture. It is the combination of the vaginal rupture with the perineal rupture that forms the complete central rupture. As the skin may alone be ruptured, so the vagina and adjacent tissues may alone be ruptured, and of this accident the following case is an illustration.

CASE III. F. G., about twenty years of age, primipara, was delivered on the 29th September, 1873, and immediately examined. The vaginal orifice was lacerated posteriorly in the usual way, but the fourchette and perineum were entire. Above the middle of the perineum the vagina was deeply lacerated. The finger passed through the orifice of the vagina could feel the rent; and by simultaneous external and internal examination the thinness of the skin and other tissues remaining entire could be made out. Further particulars of this case are given in the "Edinburgh Medical Journal" for April, 1876.

The following case seems to me to show that a central rupture may affect the skin below and the vagina above and leave the intervening parts entire. The existence of the bridge of tissue, to be afterwards described, demonstrates that the whole laceration was not an extension of the ordinary perineal laceration, and that the rupture behind the bridge was of central character. Now the central rupture was complete for a small extent behind the bridge of tissue, there being there a free passage from without into the vagina. But the bridge of tissue remained entire over some extent of the central part of the rupture, which is regarded as beginning where the ordinary perineal rupture ended, that is, at the bridge of tissue.

Case IV. E. C., ætat. 24, primipara, delivered in the Royal Maternity Hospital, on August 14, 1876, and examined on the following day. The vaginal orifice was torn posteriorly in the usual way. This laceration was continuous with a laceration of the fourchette and perineum, which extended backwards, so far as the skin was concerned, to within less than half an inch from the anal opening. At the posterior part of this laceration the little finger could be passed into the vagina behind a persistent bridge of tissue. The perineum was completely lacerated anteriorly only to a slight extent. There was a complete central rupture posteriorly, and this was separated from the ordinary perineal part of the general laceration by the bridge of tissue. The central rupture was continuous with the ordinary perineal rupture so far as the vagina and the perineal skin were concerned.

This case is not one of ordinary complete central rupture, because the perineal skin was not entire in front of it. It was only the bridge of tissue between the vagina and perineal skin that remained entire, and proved its central character.

It is a great mistake to suppose that those only are central ruptures of the perineum, where the rupture is separated from the vulvar orifice by a bridge or strap of skin connecting the labia. There can be no doubt that cases of apparently extensive simple perineal laceration are really, in many instances, ordinary perineal lacerations conjoined with the rarer central lacerations; or are really extended central lacerations or ruptures, ordinary perineal laceration or rupture never having had a chance of occurring.

In Case II. already given, had there been absence of the little band of skin connecting the labia majora in front of the partial central rupture, the case would probably and naturally have been regarded as an extensive simple perineal laceration of ordinary kind. The bridge or band of skin demonstrated where the ordinary perineal laceration ended and the partial central rupture began. In Case IV. the bridge of tissue prevented a natural mistake of like kind.

But my present remarks, while well illustrated by cases

of partial central rupture, are specially directed to complete central rupture. Now a complete perforating central perineal rupture may be conjoined with an ordinary perineal rupture, there being no connecting band or bridge to show where the one ends and the other begins. There cannot be said to be any such conjunction where a central rupture is so great that it tears forward into the vulva: for under such circumstances ordinary perineal rupture had no chance of occurring: the whole rupture is central in character. But it happens frequently, in cases of complete central rupture, that the child is not born through the rupture or new exit from the vagina, but through the proper opening of the canal; and, in such a case, the passage of the head will produce the same vaginal and perineal lacerations as if the central rupture had not previously occurred. Now, under such circumstances, it is very likely that the ordinary perineal laceration, if it occur, will be conjoined with the central one, and the relative extents of the two will be incapable of being decided by subsequent examination.

An ordinary perineal laceration is an injury quite distinct from a central rupture. It arises from insufficiency or undilatability of the orifice through which the child has to pass. A central rupture arises from an insufficiency or undilatability of the canal leading to the orifice. The parts affected in central rupture may be torn by extension of a tear begun at the fourchette as the head passes through the orifice at the vulva. If the injury would have occurred even if there had not been an ordinary perineal laceration, then it is a central rupture, accidentally conjoined and confounded with an ordinary perineal laceration. If such a laceration would not have occurred had not the ordinary perineal laceration led to it, then it is merely an extensive ordinary perineal laceration.

It is commonly related that, in cases of central rupture, the child passed through the new opening, but I am inclined to believe with Lachapelle that it rarely occurs. Such a passage is probably sometimes believed in after the event, but not carefully observed while the passage is going on.

If the child passed through the rent, it would probably extend the central rupture into the vulva, and the practitioner would, after the birth, probably regard the case as one of ordinary perineal laceration of high degree.

The simultaneous or nearly simultaneous occurrence of central and ordinary perineal rupture, as occasionally occurs, and which Lachapelle has illustrated by cases, is probably not a rare one. In such cases, if the ruptures unite, and if there be no observed antecedence of the central rupture, it will be impossible to decide whether the great extension of the rupture is central or not.

The simultaneous, or nearly simultaneous occurrence, with or without coalescence, of ordinary and of central perineal rupture, is not only described, but easily understood. For while the occiput is distending and tearing the vulvar orifice, the larger and following part, embracing the forehead, may be centrally lacerating the perineum.